

Standard Operating Procedure Refuse Disposal Division



Groundwater Monitoring

GeoTech & Orion TDS Meter Calibration — Models 130 &135

The following procedures are to be completed quarterly prior to event per manufacturer.

Setting the Cell Constant 'C':

- 1. Immerse the cell into the appropriate standard solution.
- 2. Press the 'C' key to select the free adjustable cell constant. *Note Default constant is set at 0.475 cm⁻¹.
- 3. Press the 'C' key again to select the fixed cell constant at 0.100 cm⁻¹.
- 4. Press the 'C' key a third time to switch back to free adjustable cell constant.
- 5. Use the keys to adjust the cell constant.
- 6. Press the X key to return to measurement mode.
- 7. Verify adjustment in the standard solution.
- 8. Repeat steps 2 through 6 if further adjustment is necessary.

Setting the Temperature Function 'TC':

- 1. Immerse electrode into the sample solution.
- 2. Press the 'TC' key 'nLF' will be displayed for natural water.
- 3. Press 'TC' key again for no temperature compensation 0.00 will be displayed.
- 4. Press 'TC' key a third time for adjustable temperature compensation mode -2.00 will be displayed.
- 5. Use keys to adjust temperature compensation value to desired value.
- 6. Press the X key to return to measurement mode.

Benefit of Compliance to Instruction:

- Assures accurate and reliable field data
- Conforms to Regulatory sampling protocol

Consequence of Non-Compliance to Instruction:

- Improper calibration leads to invalid data, violating sampling protocol
- Inaccurate field measurements can mask significant water quality change
- Fines from Regulatory Agency

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